

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 81-8

CLOSURE REQUIREMENTS FOR:

CITY OF SAN JOSE
SINGLETON CLASS II-2 SOLID WASTE DISPOSAL SITE
SAN JOSE, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. On January 28, 1971 the Board adopted Orders 71-6 and 71-7 prescribing waste discharge requirements for two adjacent disposal sites on Singleton Avenue (San Jose Disposal Site and Singleton Disposal Grounds) - later consolidated under City ownership in 1973. On December 19, 1978 the Board adopted Order No. 78-110, revising the waste discharge requirements for the consolidated site.
2. The entire 80 acre site was used by the City of San Jose for disposal of group 3 wastes (inert) and limited group 2 wastes such as paper, cardboard, can, cloth and yard clippings. The site is situated south of Capital Expressway and west of Coyote Creek in the City of San Jose, as shown on Attachments A and B which are made a part of this Order. Disposal operations ceased at the site on October 10, 1980. After final cover and grading the site will be used as a municipal golf course.
3. In April 1979 the discharger submitted a final site closure plan in accordance with this Board's Resolution No. 77-7. The closure plan addresses such items as final cover, drainage control, grading and methane gas control. The closure plan did not include a final grading plan.
4. The landfill is underlain by several feet of impervious silt clay which protects the underlying useable aquifers. Coyote Creek borders the site on the east.
5. Beneficial uses of Coyote Creek and the underlying ground water are:
 - Domestic and municipal water supply
 - Irrigation
 - Fish and wildlife habitat
 - Waterfowl and migratory bird habitat and resting area
 - Esthetic enjoyment
6. Land within 1000 feet of the site is used for a school, residences, roads, and agriculture.

7. This disposal site meets the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter 15, for classification as a Class II-2 disposal site which has received group 3 wastes and limited group 2 wastes.
8. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975 and this Order implements the Water Quality Objectives stated in that Plan.
9. This Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
10. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
11. This project involves the closure of a publicly owned Class II-2 facility with minor alterations to the land. Consequently, this project will not have a significant effect on the environment based upon the exemption provided in Section 15101, Title 14, California Administrative Code.

IT IS HEREBY ORDERED that, the City of San Jose shall comply with the following:

A. Site Closure Specifications

1. This solid waste disposal site shall be closed in compliance with this Board's Resolution No. 77-7 and in accordance with the closure plan cited in Finding 3 of this Order. This plan includes specifications for final cover, drainage control, grading and methane gas control.
2. No group 1 or additional group 2 wastes shall be stored or deposited on this site.
3. The exterior surfaces of the site shall be graded to a minimum of three percent in order to promote lateral runoff of precipitation and to minimize the infiltration of precipitation. In addition, the site shall be covered with a minimum of three feet of clean soil, one foot of which is to be compacted to attain a permeability no greater than 10^{-6} cm/sec.

B. Leachate and Drainage Specifications

1. Leachate or water which has contacted waste from this site shall not be discharged to waters of the State.
2. The completed disposal area shall remain protected from any washout or erosion which could occur as a result of a flood having a predicted frequency of once in 100 years. The perimeter drainage ditches and all other facilities shall be maintained to convey maximum anticipated storm runoff and to withstand differential settlement.

3. The migration of methane gas from the disposal site shall be controlled as necessary to prevent the creation of any nuisance.
4. Any waste materials which have slipped or threatened to leave the disposal site shall be removed and relocated at a suitable site upon authorization of the Executive Officer.
5. Usable ground water shall not be degraded as a result of solid waste disposal activities at this site.

C. Provisions

1. The discharger shall comply with all portions of this Order immediately upon adoption of this Order except A.1, A.3, B.3. and B.5.
2. The discharger shall comply with Specifications A.1. and A.3 according to the following time schedule:

<u>Task</u>	<u>Compliance Date</u>
a. Submit status report including final grading plan and detailed plan and time schedule for achieving compliance	by September 1, 1981
b. Submit status report	by March 15, 1982
c. Achieve full compliance	by September 15, 1982
d. Submit report documenting that full compliance has been achieved according to the closure plan specifications	by October 30, 1982

3. The discharger shall demonstrate compliance with Specification B.3 according to the following time schedule:

<u>Task</u>	<u>Compliance Date</u>
a. Install monitoring wells	by September 15, 1981
b. Submit a report on monitoring with plans and compliance time schedule if non-compliance is demonstrated	by March 1, 1982
c. Demonstrate full compliance	by September 1, 1982
4. Compliance with Specification B.5 shall be demonstrated by the installation of a ground water monitoring well(s) by September 15, 1981 and implementation of a monitoring program as specified in the Self-Monitoring Program directed by the Executive Officer.	

5. All reports described above shall be prepared by a registered engineer or a certified engineering geologist.
6. This Board considers the current property owners or any new owner to have a continuing responsibility for correcting any problems associated with this solid waste disposal site during subsequent use of the land for other purposes.
7. The discharger shall notify this Board in writing of any proposed change in ownership of this site. The current owners shall notify and provide a copy of this Order to any subsequent owner of this property or portion thereof prior to sale.
8. The discharger shall file with the Board any monitoring program which may be directed by the Executive Officer.
9. Order No. 78-110 is hereby rescinded.
10. The discharger shall permit the Regional Board:
 - a. Entry upon premises on which waste are located or in which any required records are kept,
 - b. Access to copy any records required to be kept under terms and conditions of this order,
 - c. Inspection of monitoring equipment or records, and
 - d. Sampling of any discharge.

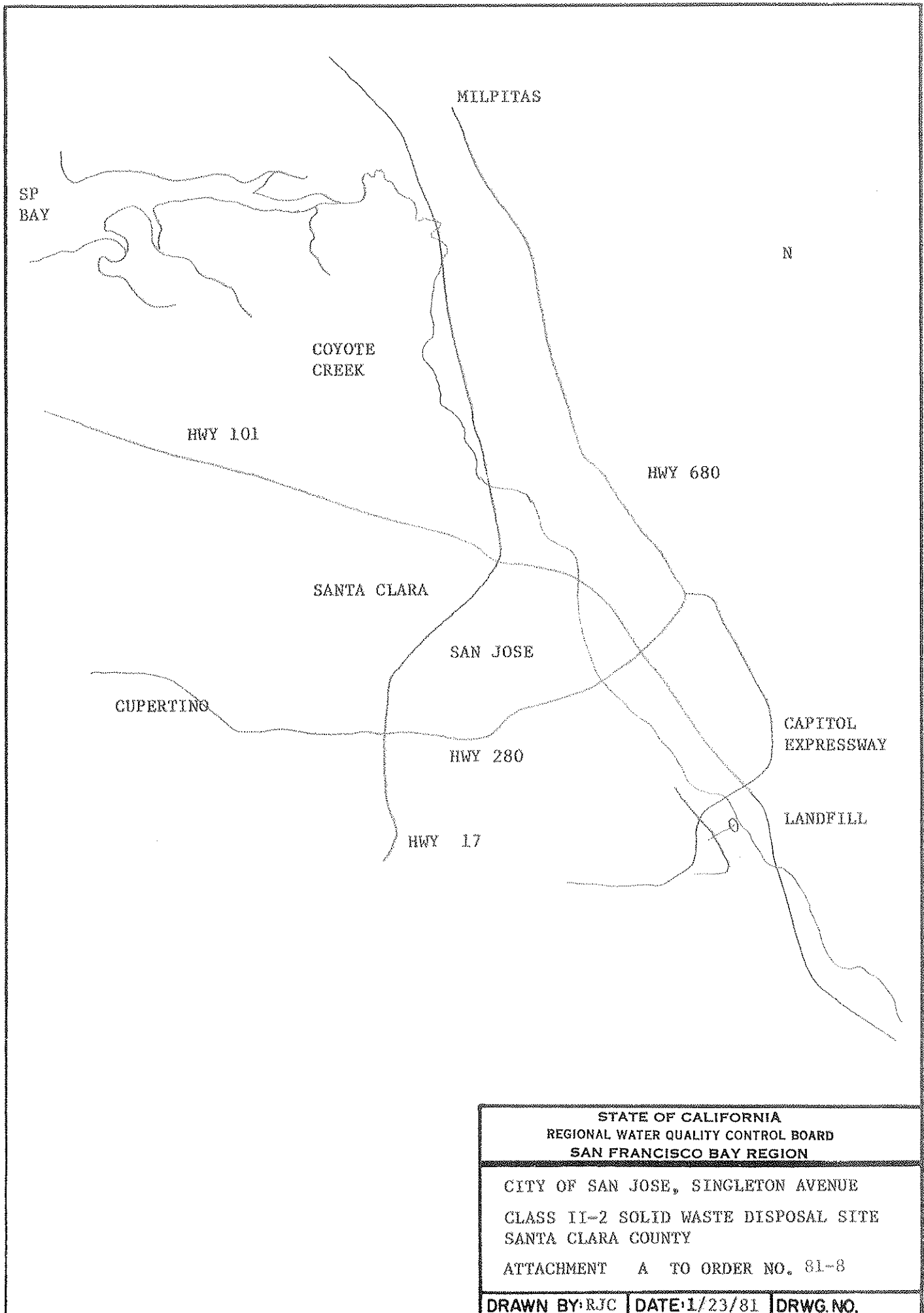
I, Fred H. Dierker, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 18, 1981.

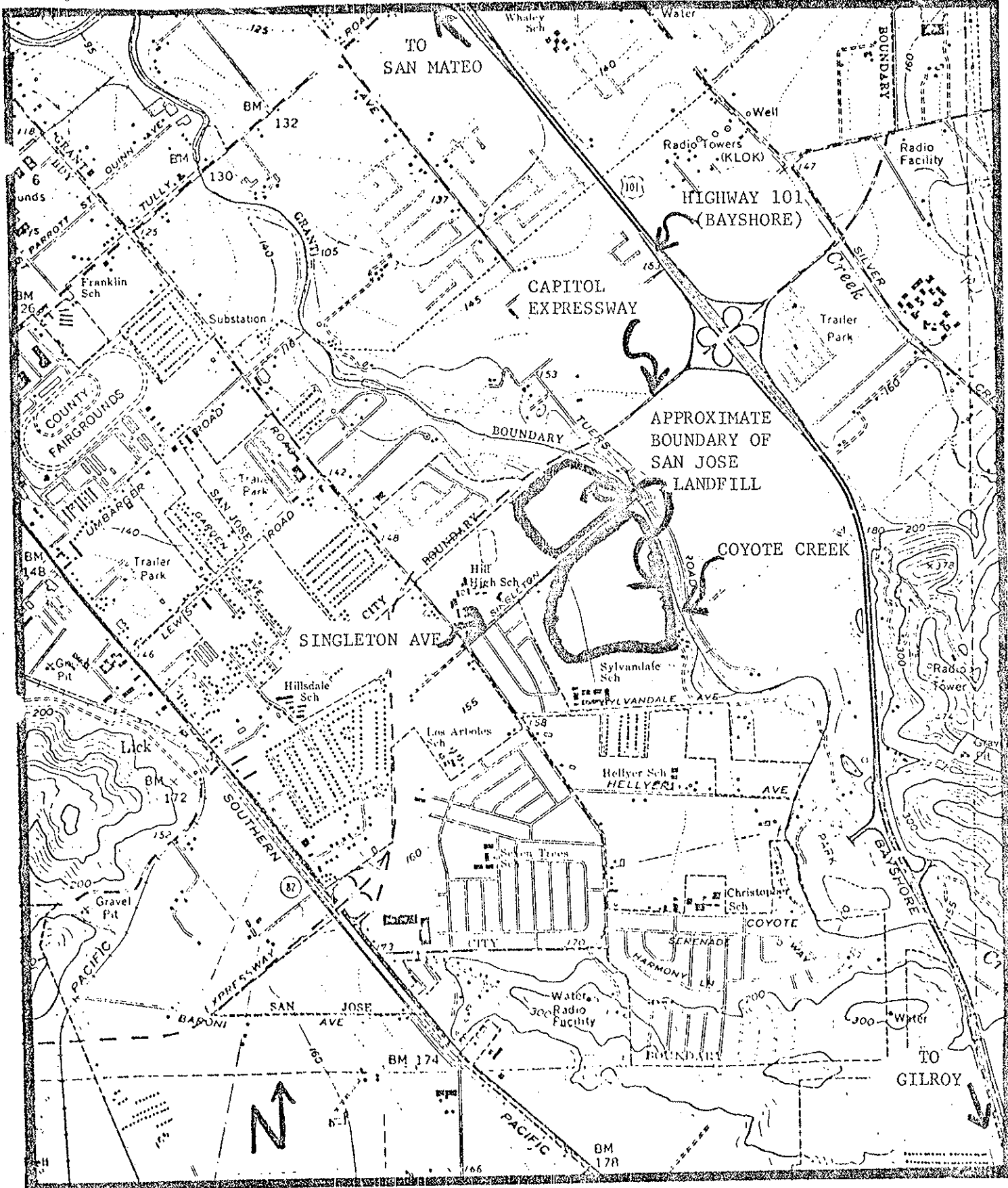
FRED H. DIERKER
Executive Officer

Attachment:

A - Map

B - Map





STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

CITY OF SAN JOSE, SINGLETON AVENUE
CLASS II-2 SOLID WASTE DISPOSAL SITE
SANTA CLARA COUNTY

ATTACHMENT B

ORDER NO. 81-8

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESOLUTION NO. 77-7

MINIMUM CRITERIA FOR PROPER CLOSURE OF
CLASS II SOLID WASTE DISPOSAL SITES

- I. WHEREAS, experience has shown that Class II solid waste disposal sites can be sources of serious water pollution problems even after their use has been terminated, unless properly closed, and
- II. WHEREAS, these problems may include: odors, discharge of leachate, exposed refuse due to inadequate cover, and ponding of refuse-polluted water on the site, and
- III. WHEREAS, Section 2535 of the California Administrative Code provides as follows:

Completion of Disposal Operations. (a) Prior to cessation of disposal operations at a waste disposal site, the operator shall submit a technical report to the appropriate regional board describing the methods and controls to be used to assure protection of the quality of surface and groundwaters of the area during final operations and with any proposed subsequent use of the land. This report shall be prepared by or under the supervision of a registered engineer or a certified engineering geologist.

(b) The methods used to close a site and assure continuous protection of the quality of surface and groundwater shall comply with waste discharge requirements established by the regional board.

(c) The owner of the waste disposal site shall have a continuing responsibility to assure protection of useable waters from the waste discharge, and from gases and leachate that are caused by infiltration of precipitation or drainage waters into the waste disposal areas or by infiltration of water applied to the waste disposal areas during subsequent use of the property for other purposes, and

- IV. WHEREAS, the establishment of minimum criteria for proper closure of Class II solid waste disposal sites is desirable to protect the quality of waters of the State and to alert site owners and operators as to their specific responsibilities, and

VII. BE IT FURTHER RESOLVED that this Board's Executive Officer will request that closure plans be submitted by operators of all Class II sites at the earliest practicable date. Closure plans will be approved by this Board by inclusion in waste discharge requirements. The Board will amend closure plans as necessary to provide for conformance with the above minimum criteria. Site closure plans shall include the following:

- a. The boundaries of areas used for waste disposal.
- b. Method of control of surface drainage flow from the site.
- c. Evaluation of the anticipated settlement due to decomposition and consolidation of the wastes.
- d. Thickness of cover and physical properties including permeability, expansion characteristics and erodibility.
- e. Relationship of waste disposal area to underlying groundwater quality.
- f. Location of groundwater monitoring points.
- g. Method for control of methane.
- h. Proposed subsequent use of the land.

VIII. BE IT FURTHER RESOLVED that this Board will normally require implementation of the site closure plan as rapidly as possible after completion of group 2 waste disposal operations at a site or portion thereof. The Board may authorize delays of specified duration in meeting final slope requirements pending determination of subsequent land use, provided interim measures are taken to protect water quality.

IX. BE IT FURTHER RESOLVED that it is the intention of this Board to take all measures practicable to ensure that subsequent owners of sites are made aware of site closure requirements.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 19, 1977.

FRED H. DIERKER
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

POST-CLOSURE SELF-MONITORING PROGRAM

FOR

CITY OF SAN JOSE, SINGLETON ROAD DISPOSAL SITE
SANTA CLARA COUNTY

PART A

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. This self-monitoring program is issued in accordance with Section C.8. of Regional Board Order No. 81-8.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A Grab Sample is a discrete water sample collected at any time.
2. Receiving Water(s) refers to any surface water which actually or potentially receives surface or groundwaters which pass over, through, or under waste materials. In this case the receiving water is Coyote Creek.
3. Standard observations refer to the following:
 - a. Receiving Waters.
 - (1) Discoloration and turbidity: description of color, source, and size of affected area.
 - (2) Evidence of odors, presence or absence, characterization, source, and distance of travel from source.
 - (3) Evidence of beneficial water use: presence of water-associated wildlife, fishermen, and other recreational activities in the vicinity of the sampling station.
 - (4) Hydrographic conditions, such water level, high and low tides, or floods.
 - (5) Weather conditions:
 - (a) Wind direction and estimated velocity.
 - (b) Precipitation -- total during the previous five days and on the day of the observation.
 - b. Perimeter of the former disposal area.
 - (1) Evidence of liquid leaving or entering the former disposal area, estimated size of affected area and flow rate. (Show affected area on a sketch.)
 - (2) Evidence of odors, presence or absence, the characteristic, intensity, source, and distance of travel from the source.
 - (3) Evidence of erosion and/or 'day-lighted' refuse.
 - c. The former disposal area.
 - (1) Evidence of ponded water at any point on the disposal site.
 - (2) Evidence of odors, presence or absence, the characteristic, intensity, source, and distance of travel from the source.
 - (3) Evidence of erosion and/or 'day-lighted' refuse.

4. Standard Analyses and measurements refer to:

- a. Chemical Oxygen Demand in mg./l.
- b. Dissolved Oxygen in mg./l.
- c. Dissolved Sulfide in mg./l.
- d. pH.
- e. Specific Conductivity in micromhos/cm.
- f. Chloride in mg./l.
- g. Total Dissolved Solids in mg./l.
- h. Turbidity in Nephelometric Turbidity Units (NTU).
- i. Water elevation in feet above mean sea level.
- j. Nitrate Nitrogen (as N) in mg./l.
- k. Total Kjeldahl Nitrogen (as N) in mg./l.
- l. Synthetic organic scan using EPA Methods 624 and 625, identifying all major peaks in micrograms/liter (ppb).

D. OBSERVATIONS, SAMPLING AND ANALYSES.

The discharger is required to perform observations, sampling and analyses according to the schedule specified in part B.

E. RECORDS TO BE MAINTAINED.

Written records shall be maintained by the City and shall be retained for a minimum of 3 years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board. Such records shall show the following for each sample:

1. Identity of sampling and observation stations by number.
2. Date and time of sampling and/or observations.
3. Date and time that analyses are started and completed, and name of personnel performing the analyses.
4. Complete procedure used, including the method of preserving samples and the identity and volumes or reagents used. A reference to a specific section of Standard Methods is satisfactory.
5. Calculation of results.
6. Results of analyses and/or observations.

F. REPORTS TO BE FILED WITH THE REGIONAL BOARD.

Written reports shall be filed each quarter (unless specified otherwise in Part B) by the fifteenth day of the following month. In addition, an annual report shall be filed as indicated in F.5. The reports shall be comprised of the following:

1. Letter of Transmittal: a letter transmitting the essential points in each self-monitoring report shall accompany each report. Such a letter shall include a discussion of any requirement violations found during the past quarter and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities

expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations a reference to the appropriate document will be satisfactory. If no violations have occurred in the last quarter this shall be stated in the letter of transmittal. The letter shall also contain a statement by the responsible company or governmental employee, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct.

2. Each report shall include a compliance evaluation summary sheet. The report format must be approved by the Regional Board.
3. A map or aerial photograph shall accompany each report showing sampling and observation station locations.
4. Results of analyses and observations specified in Part B must be included with each report. The laboratory director shall sign the laboratory statement of analytical results.
5. By January 15 of each year the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The report shall contain:
 - (a) Tabular and graphical summaries of the monitoring data obtained during the previous year.
 - (b) A comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.
 - (c) A map showing the area, if any, in which filling has been completed during the previous calendar year.

PART B

I. DESCRIPTION OF OBSERVATION STATIONS AND SCHEDULE OF OBSERVATIONS, SAMPLING AND ANALYSES.

<u>Station</u>	<u>Description</u>	<u>Observations</u>	<u>Frequency</u>
S-1 thru S-'n'. (surface)	Located on the waste disposal area as delineated by a 500 foot grid network.	Standard observations for the disposal area.	Weekly.
P-1 thru P-'n'. (perimeter)	Located at equidistant intervals not exceeding 1000 feet around the perimeter of the disposal area.	Standard observations for the perimeter.	Weekly.
L-1 thru L-'n'. (Seepage, or "Leak".)	At any point(s) at which seepage is found occurring from the disposal area.	Standard observations for the perimeter. Standard analyses other than i.	Daily, until remedial action is taken and seepage ceases.
CU-1 thru CU-'n'. (Receiving waters, upstream.)	Located in the receiving water 200 feet upstream from the upper boundary of the disposal area.	Standard observations for receiving waters. Standard analyses other than i.	Weekly, under normal conditions. Daily, during a seepage event. Daily, during a seepage event.
CD-1 thru CD-'n'. (Receiving waters, downstream.)	Located in the receiving water 200 feet downstream from the lower boundary of the disposal area.	Same as receiving waters, upstream.	Same as receiving waters, upstream.

G-1 thru G-'n'. (Groundwater monitoring.)	Located on the perimeter as shown on the map attached as appendix A.	All standard analyses.	Once each quarter.
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M-1 thru M-'n'. (Methane monitoring.)	Located on the peri- meter as shown on the map attached as appendix A.	Methane concen- tration in %.	Once each quarter.
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II. MISCELLANEOUS REPORTING.

A. A report shall be made by telephone of any seepage from the disposal area immediately after it is discovered. A written report shall be filed with this Board within five days. It shall contain the following information: (1) a map showing the location(s) of discharge, (2) approximate flow rate, (3) nature of the effect; i.e., all pertinent observations and/or analyses, and (4) corrective measures underway or proposed.

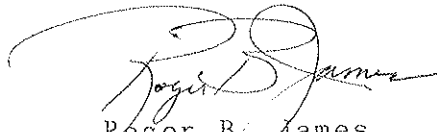
B. A well drilling log shall be submitted for each sampling well established per this monitoring program, as well as a report of inspection or certification that each well has been constructed in accordance with the construction standards of the Santa Clara Valley Water District. These shall be filed within 30 days after this program has been issued.

C. A complete documentation of all actions taken previously to observe, minimize, and control the migration of methane gas shall be submitted within 30 days after this program has been issued. Any further remedial actions or investigations shall be approved in advance by the Executive Officer of the Regional Board.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing monitoring program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 81-8.

2. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and may be revised if the Executive officer deems such revision to be necessary or desirable.



Roger B. James
Executive Officer

JANUARY 16, 1985
Date Ordered

City of San Jose
Sanitation Department

9. Food and medicine

